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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,347	11/25/2003	Kyeong Ho Moon	0465-1086P	3903
2292 7590 12/31/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER KHAN, OMER S				
ART UNIT 4181		PAPER NUMBER		
NOTIFICATION DATE 12/31/2007		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/720,347

Applicant(s)

MOON ET AL.

Examiner

Omer S. Khan

Art Unit

4181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/06)
Paper No(s)/Mail Date 11/29/2004 and 06/06/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Home Network System for Controlling the Appliance from a Wireless Server.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6 – 8, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by reference A: Kim, Jong Ki in Korean publication number KR1020020045057.

Consider claim 1, Kim discloses a home network system comprising, (**See reference A abstract, where discusses a home appliance network**). Kim discloses the home network system comprising a home server controlling home appliances, (**See reference A abstract and page 3, The Structure and Function of invention, paragraph 2, where Kim discusses a management server (5) connected to the**

refrigerator for controlling the operation of electronics (60)). Kim discloses a first wireless communication means connected to the home server, (See reference A, Drawing 1, and page 3, paragraph 3, where Kim discusses a refrigerator radio communications unit (20) is part of the refrigerator that is connected to the management server for transmitting the operation of control command). Kim discloses a second wireless communication means connected to the home appliances, (See reference A Drawing 1, and page 3, paragraph 13, where Kim discusses an electronic radio communications unit (70) is connected to the electronics). Kim discloses the second communication means communicating with the first wireless communication means, (See reference A Drawing 1, and page 3, paragraph 12, where Kim discusses an electronic radio communications unit (70) is communicates with the refrigerator radio communications unit (20)).

Consider claim 6, Kim discloses the home network system as claimed in claim 1, wherein the first and second wireless communication means are RF (Radio Frequency) communication modules, (See reference A, Drawing 3 and page 3, paragraph 12 where, Kim discusses a refrigerator radio communications unit (20) and electronic radio communications unit (70) communicates in an infrared radio frequencies range).

Consider claim 7, t Kim discloses he home network system as claimed in claim 1, wherein the home server displays a select screen showing functions of the home

appliances, **(See reference A, page 3, paragraph 4 and 5, where Kim discusses a refrigerator displays unit (11) controlling the image displayed in the display unit).**

Consider claim 8, Kim discloses the home network system as claimed in claim 1, wherein the home server provides the select screen showing functions of the home appliances to an external terminal, **(See reference A, page 3, paragraph 3 and 10, where Kim discusses the home server provides the control capability of the home appliances to an external communication network via communication part (17)).**

Consider claim 15, Kim discloses the home network system as claimed in claim 1, wherein the second wireless communication means is mounted inside the home appliance, **(See reference A Drawing 1, and page 3, paragraph 13, where Kim discusses an electronic radio communications unit (70) is connected to and incorporated within the electronics).**

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 – 5, and 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over reference A: Kim, Jong Ki in Korean publication number KR1020020045057, and further in view of reference B: Ukon, Juichiro et al. in US 5521845.

Consider claims 2 and 3, Kim does not specifically disclose the home network system as claimed in claim 1, wherein the home server is connected with the first wireless communication means by cable, however, Ukon discloses a system wherein the home server is connected with the first wireless communication means by cable RS-232C, **(See reference B, Fig 1 and column 3 lines 46 – 48 and lines 58 – 61, where Ukon discloses a system wherein a computer (3) is connected with a radio machine (2) through an appropriate hard wire connection such as RS-232C).**

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home server is connected with the first wireless communication means by cable RS-232C, as taught by Ukon, to design a wireless, cost effective, and secure analytical system for remote transmission of data, **(See reference B column 1 lines 41 – 48).**

Consider claims 4 and 5, Kim dose not specifically discloses the home network system as claimed in claim 1, wherein the home appliances are connected with the second wireless communication means by cable RS-232C, however, Ukon discloses the home appliances are connected with the second wireless communication means by cable RS-232C, **(See reference B, Fig 1 and column 3 lines 26 – 29 and lines 58 – 61, where Ukon discloses a system wherein an analytical machine (1) is connected with a different radio machine (2) through an appropriate hard wire connection such as RS-232C).**

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home appliances are connected with the second wireless communication means by cable RS-232C, as taught by Ukon, to design a wireless, cost effective, and secure analytical system for remote transmission of data, **(See reference B column 1 lines 41 – 48).**

Consider claim 13, Kim dose not specifically discloses the home network system as claimed in claim 1, wherein the home server controls a channel of the first wireless communication means, however, Ukon discloses the home server controls a channel of the first wireless communication means **(See reference B, Fig 1 and column 3 lines 30 – 34, column 4 lines 31 – 49, where Ukon discloses a system wherein a plurality of computers (3) are connected with the n number of radio machine (2);**

therefore, the computers communicate in a multi channel radio communication system).

Consider claim 16, Kim dose not specifically discloses the home network system as claimed in claim 1, wherein the second wireless communication means respectively connected to the home appliances have different channels, however, Ukon discloses the second wireless communication means respectively connected to the home appliances have different channels **(See reference B, Fig 1 and column 3 lines 21 – 24, column 4 lines 31 – 49, and claim 5, where Ukon discloses a system wherein the n number of analytical machines (1) are connected with a corresponding radio machine (2); therefore, the analytical machines communicate in a multi channel radio communication system).**

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home server controls a channel of the first wireless communication means and the second wireless communication means respectively connected to the home appliances have different channels, as taught by Ukon, to design a wireless, cost effective, and secure analytical system for remote transmission of data, **(See reference B column 1 lines 41 – 48).**

Consider claim 9, Kim dose not specifically discloses the home network system as claimed in claim 1, wherein the home server stores a record regarding operations of the home appliances, however, Ukon discloses the home server stores a record regarding operations of the home appliances **(See reference B, Fig 3 and column 3 lines 30 – 34, column 4 lines 31 – 49, where Ukon discloses an analytical machines and tools (1) can gather and store the analytical data and transmitted to the radio machine (2) to computers(3) that are connected to the server (21)).**

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home server stores a record regarding operations of the home appliances, as taught by Ukon, to design a wireless, cost effective, and secure analytical system for remote transmission of data, **(See reference B column 1 lines 41 – 48).**

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over reference A: Kim, Jong Ki in Korean publication number KR1020020045057, and further in view of reference B: Ukon, Juichiro et al. in US 5521845, and further in view of reference C: Christensen, Carlos Melia et al. in US PG Pub 20020047774.

Consider claim 10, Kim dose not specifically discloses the home network system as claimed in claim 9, wherein the record regarding operations of the home appliances includes a driving time and mode of the home appliance, and power consumption,

however, Christensen teaches the home network system wherein the record regarding operations of the home appliances includes a driving time and mode of the home appliance, and power consumption, **(See reference C, paragraph 63, 239, and 286, where teaches home automation system where a predetermined routines related to the operation of one or more devices over a period of time, a clock is used for timer functions such as for performing preprogrammed events, and a power meter the power or current supplied to the electric appliance connected to the output device, and save, process and transmit the metered information).**

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home server stores wherein the record regarding operations of the home appliances includes a driving time and mode of the home appliance, and power consumption, as taught by Christensen, to ensure a high reliability, range/coverage, versatility, and flexibility in a RF home automation system with replicable controllers, **(See reference C Paragraph 22).**

7. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over reference A: Kim, Jong Ki in Korean publication number KR1020020045057, and further in view of reference C: Christensen, Carlos Melia et al. in US PG Pub 20020047774.

Consider claim 11, the home network system as claimed in claim 1, wherein the home server has a reservation function of operating the home appliance at a preset time, however, Christensen teaches the home server has a reservation function of operating the home appliance at a preset time, **(See reference C, paragraph 63, 239, where teaches home automation system where a predetermined routines related to the operation of one or more devices over a period of time, and a clock is used for timer functions such as for performing preprogrammed events).**

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home server has a reservation function of operating the home appliance at a preset time, as taught by Christensen, to ensure a high reliability, range/coverage, versatility, and flexibility in a RF home automation system with replicable controllers, **(See reference C Paragraph 22).**

Consider claim 12, Kim dose not specifically discloses the home network system as claimed in claim 1, wherein the first and second wireless communication means have frequency band between 300 MHz and 2.9 GHz, however, Christensen teaches the home network system wherein the first and second wireless communication means have frequency band between 300 MHz and 2.9 GHz, **(See Reference C, where teaches home automation system operate within a public frequency range**

wherein a license is not required, thereby further reducing cost, i.e. in the United States frequency band 900 MHz, 2.4 GHz are available unlicensed for public use).

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home network system wherein the first and second wireless communication means have frequency band between 300 MHz and 2.9 GHz, as taught by Christensen, to ensure a high reliability, range/coverage, versatility, and flexibility in a RF home automation system with replicable controllers, **(See reference B column 1 lines 41 – 48).**

8. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over reference A: Kim, Jong Ki in Korean publication number KR1020020045057, and further in view of reference D: Park, Joon Hyung in US PG Pub 20020063633.

Consider claim 14, Kim does not specifically disclose the home network system as claimed in claim 1, wherein the first wireless communication means is mounted inside the home server, however Park teaches the home network system wherein the first wireless communication means is mounted inside the home server, **(See reference D, paragraph 30 and 33, where Park discusses a portable wireless communication equipment (190) wherein a portable communication terminal unit is established as a home server).**

It would have been obvious to ordinary skilled artisan at the time the invention was made to modify the invention of Kim, and modify the home network system where the home network system wherein the first wireless communication means is mounted inside the home server, as taught by Park, to design a network control system where the user has easily access to the home server, and eliminate the subscription need for a cable network, **(See reference D paragraph 16 and 17).**

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US PG Pub 20010011940 by where he discusses a Method and an Apparatus for Identifying Codes for Remotely Controlling Electronic Devices via a Wireless Communication Medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omer S. Khan whose telephone number is (571)270-5146. The examiner can normally be reached on M-F 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Omer S Khan/
Examiner, Art Unit 4181

12/20/2007

/Nick Corsaro/

Supervisory Patent Examiner, Art Unit 4181